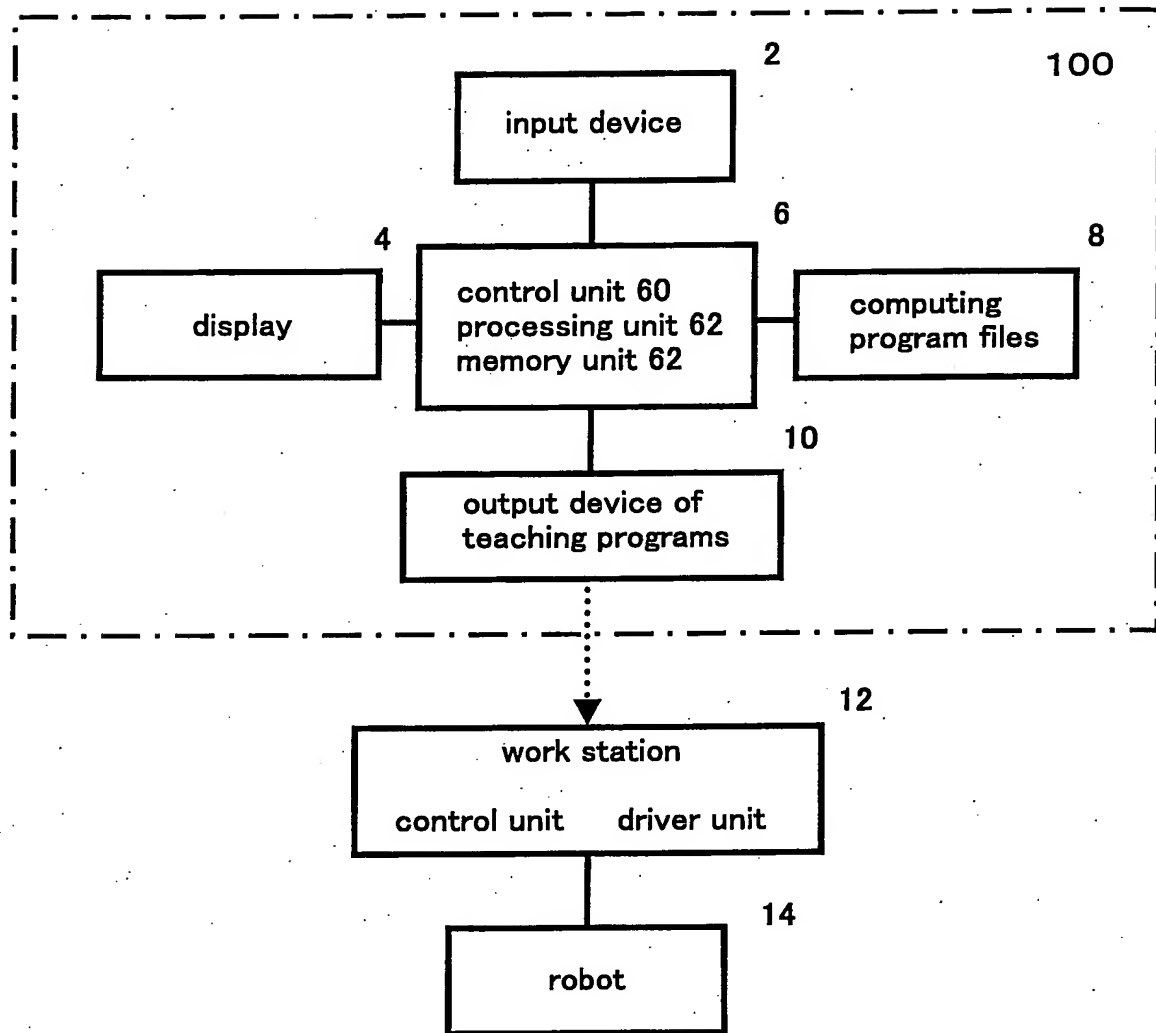
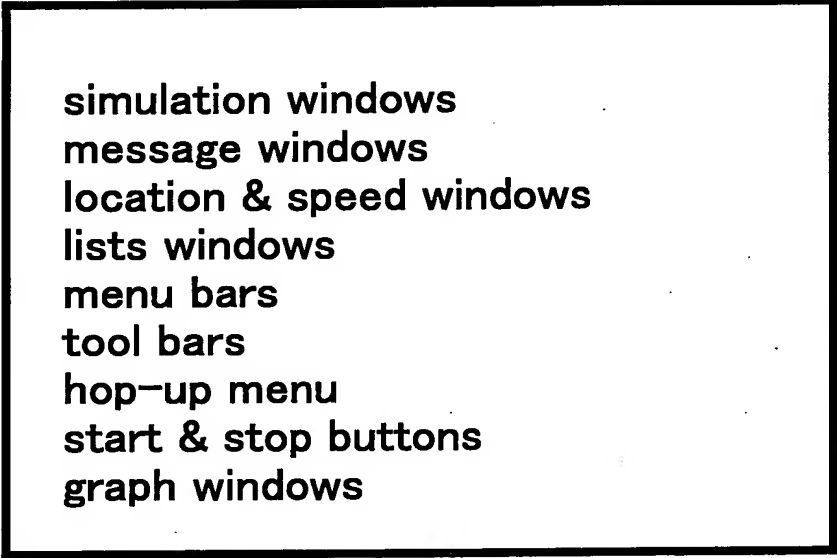


Fig. 1



**Fig. 2****display 4**

simulation windows  
message windows  
location & speed windows  
lists windows  
menu bars  
tool bars  
hop-up menu  
start & stop buttons  
graph windows

Fig. 3

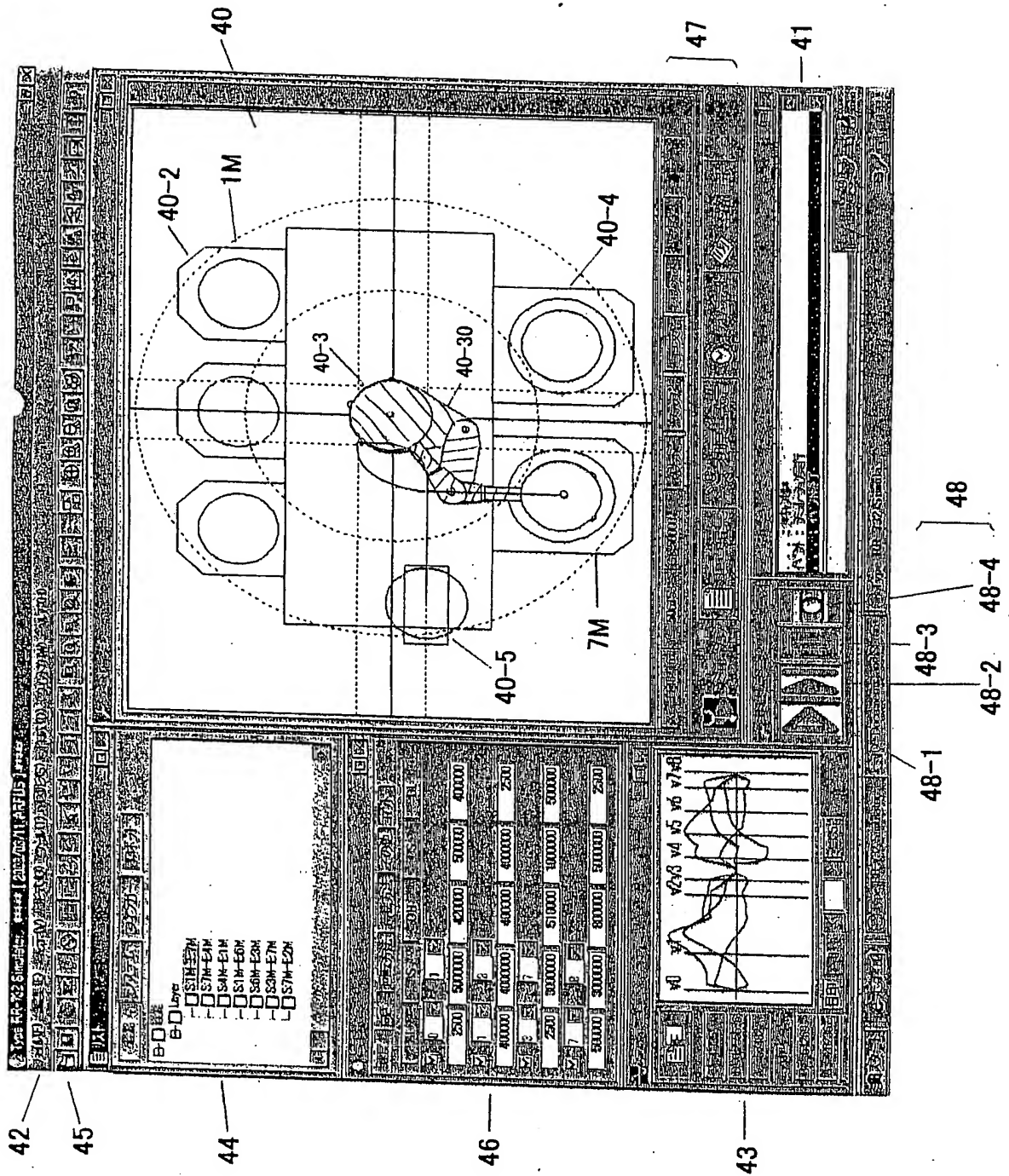


Fig. 4

8

display coordinates  
display a robot (shape & location)  
display a finger (shape & location)  
display time  
route generation & route modification  
obstacles region generation,  
and modification  
screen expanding, shrinking,  
and shifting  
coordinate axes (X, Y, Z) shifting  
rotation & copy  
distance between vertexes  
data input  
inversion input

Fig. 5

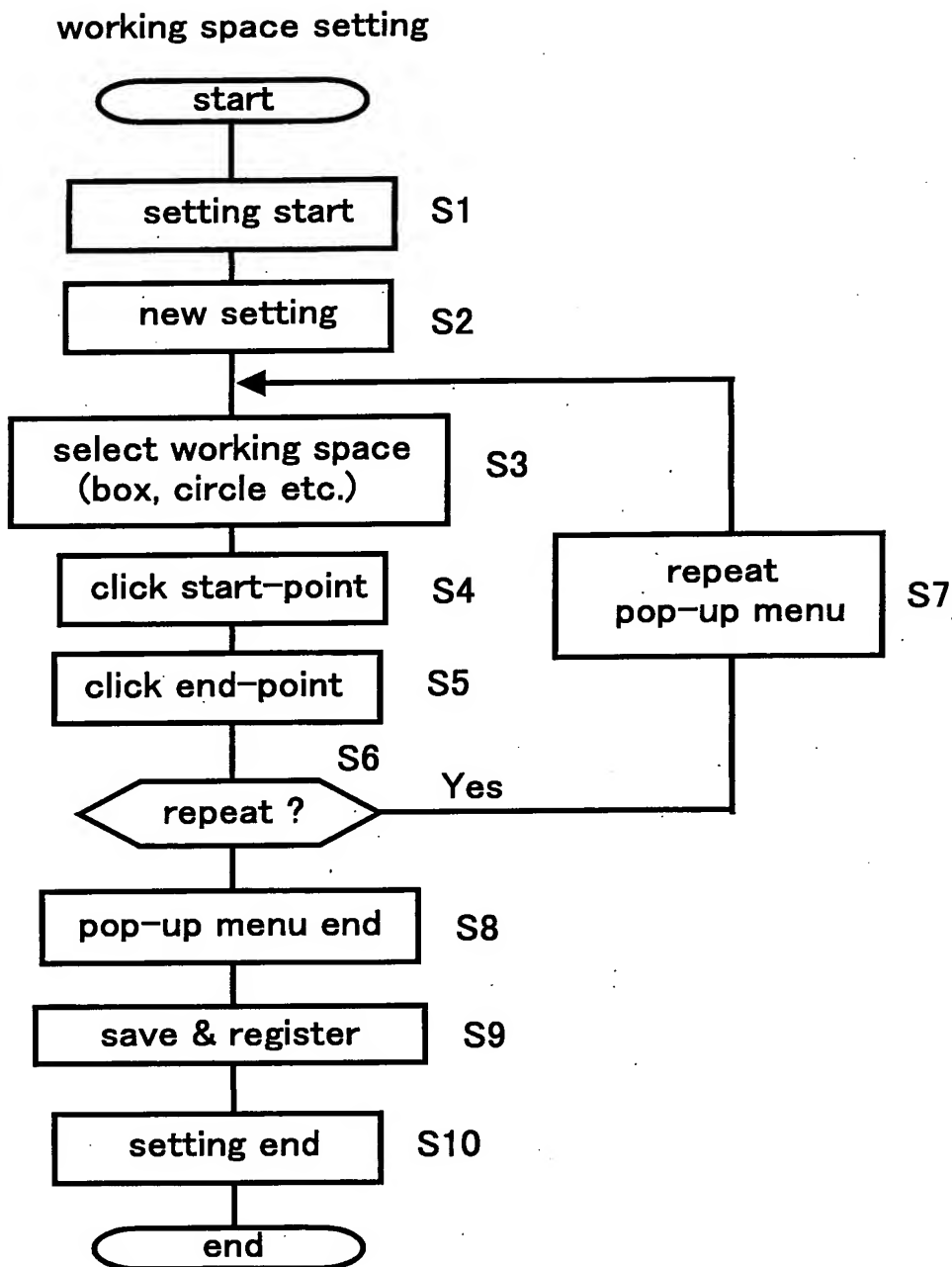


Fig. 6

## obstacles region setting

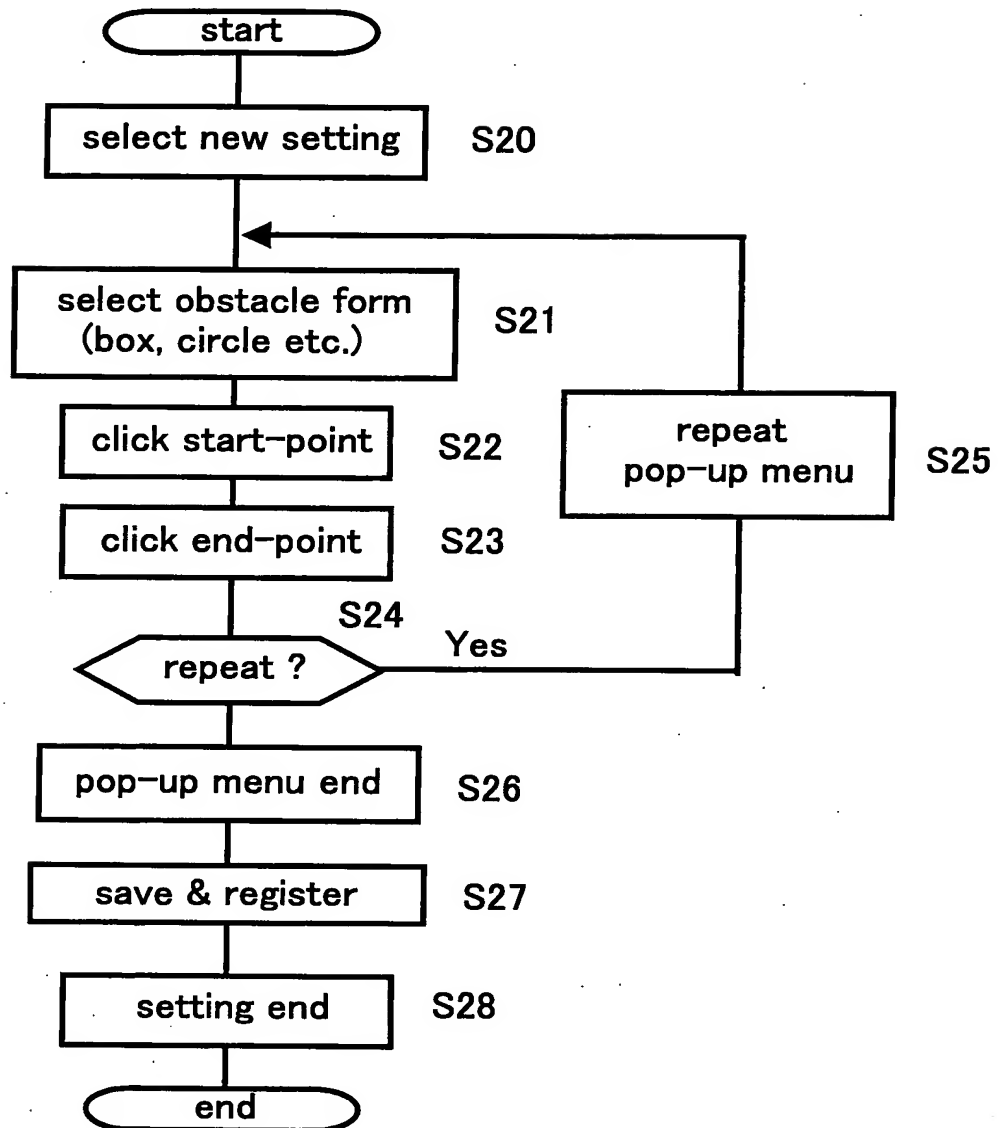


Fig. 7

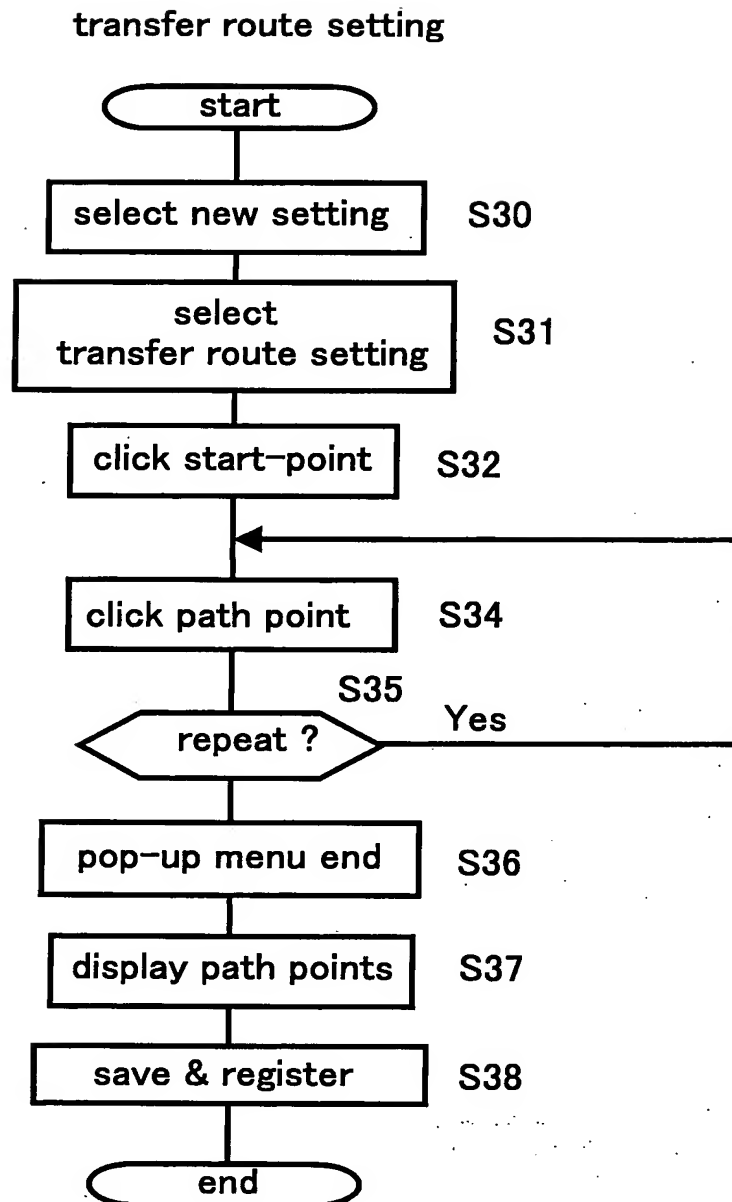


Fig. 8

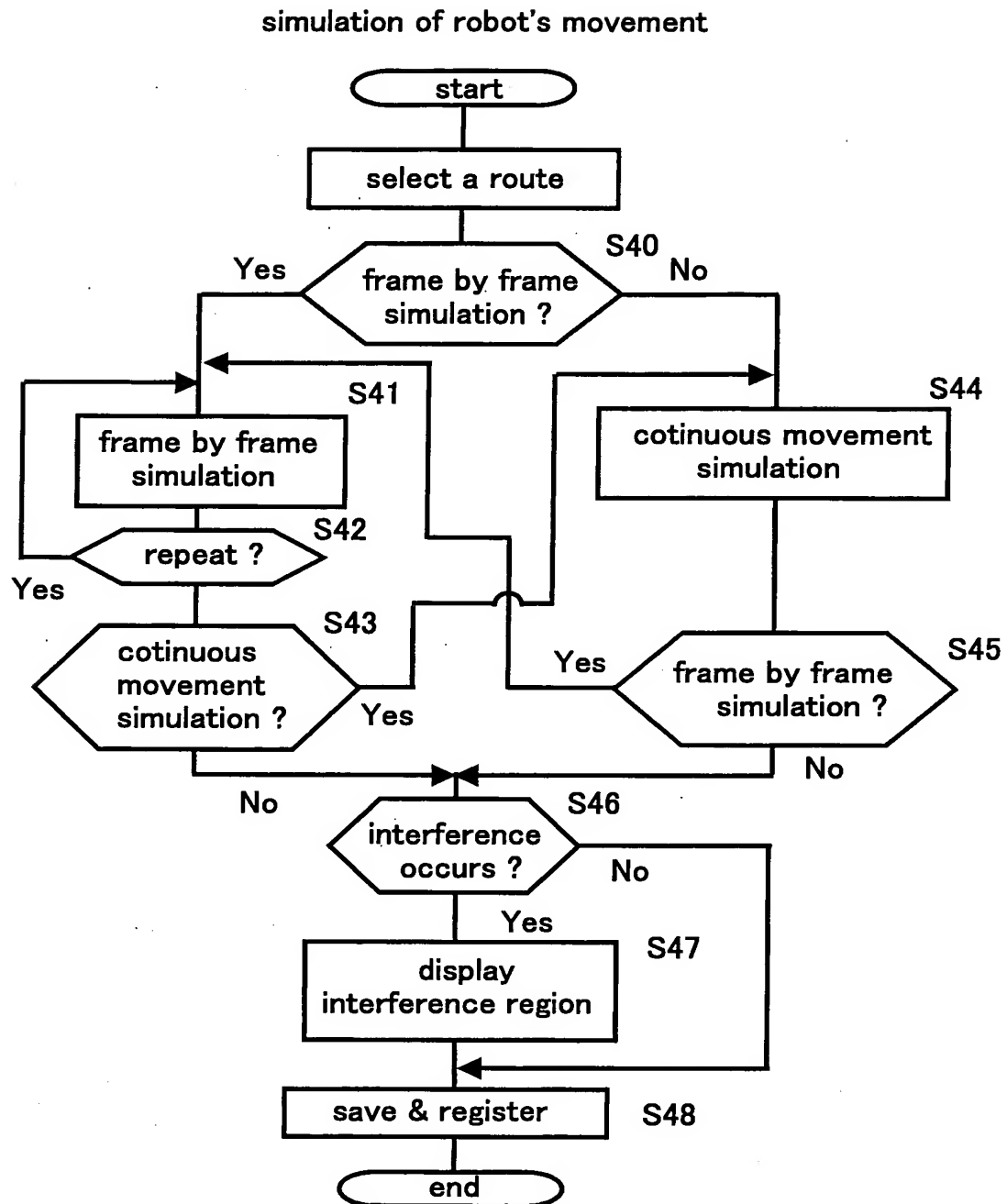


Fig. 9

